

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology National Voluntary Laboratory Accreditation Program

LAB BULLETIN

ISSUE DATE:

April 26, 2006

NUMBER: LB-15-2006

LAP: CMT LAP

SUBJECT: Addition of Personal Identification Verification Test Methods to the NVLAP Cryptographic Module Testing LAP

At the request of the NIST Personal Identity Verification Program (NPIVP), NVLAP announces the addition of two test methods to the NVLAP Cryptographic Module Testing LAP (CMT LAP). These test methods are for the testing of PIV card applications and middleware as prescribed by the NPIVP, http://www.nist.gov/npivp.

NVLAP will accept applications for accreditation from any laboratory that meets the requirements of NIST Handbook 150, *NVLAP Procedures and General Requirements* and the technical requirements for testing prescribed by NPIVP. (Note: See http://www.nist.gov/nvlap for the 2006 edition of NIST Handbook 150.)

Background

The NIST Personal Identity Verification Program (NPIVP) in the Computer Security Division of the Information Technology Laboratory of NIST is initiating a program to validate Personal Identification Verification (PIV) components and sub-systems required by Federal Information Processing Standard (FIPS) 201 that meet the NPIVP requirements. This program is being created in response to Homeland Security Presidential Directive 12 (HSPD #12).

In order to be listed on the NPIVP validated products list, a product must be tested in a designated laboratory using approved test methods and test tools.

Conditions for a laboratory to be designated by the NPIVP

NPIVP has designated third-party, private sector test laboratories that are currently accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for Cryptographic Module Testing and that agree to meet NPIVP requirements.

In order for a laboratory to be designated by the NPIVP, a laboratory agrees to:

- 1. request review, approval, and designation as a NPIVP Testing Laboratory;
- 2. offer PIV card application and middleware testing service in accordance with the rules established by NPIVP;
- 3. provide a copy of its NVLAP Certificate and Scope of Accreditation for FIPS 140-2 testing to NPIVP;
- 4. maintain its NVLAP accreditation for FIPS 140-2 validation testing and notify the NPIVP manager if accreditation is not maintained;

- 5. meet the requirements of NIST Handbook 150 and the requirements of NIST Handbook 150-17 for FIPS 140-2 testing and the NPIVP testing, as appropriate;
- 6. use only conformance tests and tools provided by NPIVP for PIV card application and middleware testing;
- 7. not modify any NPIVP provided test or tool;
- 8. not distribute any NPIVP test or tool to any third party;
- 9. become competent in the field of PIV card application and middleware testing, including review of the tools (i.e., specifications, test programs, test suites, documentation), create the capabilities needed to perform the required tests, and train its laboratory management and technical personnel;
- 10. write procedures and instructions for PIV card application and middleware testing in accordance with NVLAP requirements;
- 11. report the results of PIV card application and middleware testing to the designated NPIVP Validation Authority (PVA) after completion of a test;
- 12. use marks, symbols, and logos associated with the NPIVP in accordance with the rules and directions of the PVA*;
- 13. maintain records of all PIV card application and middleware testing in accordance with NVLAP requirements, maintain written procedures and instructions that help demonstrate its competence to conduct the tests, and agree to cooperate with any on-site assessments required both during scheduled and random monitoring visits;
- 14. apply for NVLAP accreditation for PIV card application and middleware testing when such accreditation becomes available, achieve accreditation for PIV testing within a period of time set by the NPIVP, and maintain NVLAP accreditation;
- 15. apply for expansion of its NVLAP scope of accreditation when the NPIVP is modified and when NVLAP accreditation is available for those modifications.
- * The laboratory may use the NVLAP symbol on test reports only if the report contains results of a test for which it is NVLAP-accredited and the requirements of NIST Handbook 150 are met.

NVLAP accreditation for PIV card application and middleware testing for laboratories that are currently NVLAP-accredited for Cryptographic Module Testing and that are currently interim-designated by NPIVP

Laboratories that are currently NVLAP-accredited for Cryptographic Module Testing and that have been designated on an interim basis by NPIVP may add PIV card application and middleware test methods to their NVLAP scope of accreditation by meeting the following requirements.

NVLAP LAB BULLETIN NUMBER: LB-15-2006

- 1. The laboratory must become competent in the field of PIV card application and middleware testing, including review of the tools (i.e., specifications, test programs, test suites, documentation), create the capabilities needed to perform the required tests, and train its laboratory management and technical personnel.
- 2. The laboratory must apply for accreditation for PIV testing. For an application, visit the NVLAP web site at http://ts.nist.gov/ts/htdocs/210/214/docs/formprin.htm and click on Information Technology Security Testing, or contact Jon Crickenberger, Program Manager, by phone at 301-975-5305 or by e-mail: jon.crickenberger@nist.gov.
- 3. The laboratory must participate in NVLAP Proficiency Testing for PIV card application and middleware. This round of proficiency testing uses the test tools provided to designated laboratories by PIV and reference implementations provided by NPIVP in cooperation with NVLAP. The proficiency test instructions, data sheets, and reference implementations are available from NPIVP.

A laboratory must complete the proficiency testing and submit its results for review. If the laboratory has demonstrated competence in conducting and reporting the tests, it can continue to the next step.

A laboratory that does not demonstrate competence through proficiency testing will be given the opportunity to conduct a retest.

- 4. The laboratory must submit its latest management system manual to NVLAP for review and be prepared to submit to NVLAP the procedures and instructions that it has written for the conduct of PIV card application and middleware testing.
- 5. The laboratory must undergo a competence assessment to be conducted by telephone by NVLAP assessors. This telephone assessment may take several hours. All laboratory personnel involved in PIV card application and middleware testing should participate.

A laboratory that successfully completes the telephone assessment will not require an onsite assessment for the addition of the PIV test methods.

The assessment will include, but is not limited to:

- NIST Handbook 150 requirements;
- review of the laboratory management system manual;
- review of the proficiency testing results;
- NIST tool installation, configuration, and use;
- vendor documentation review;
- reporting to NPIVP;
- records and recordkeeping concerning PIV testing;
- laboratory services, consulting, and testing for PIV card application and middleware;
- staff training.

A laboratory that meets the NVLAP requirements and that has addressed any nonconformities found during the assessment process will be accredited and PIV card application and middleware testing will be added to its NVLAP Scope of Accreditation. NVLAP will formally inform NPIVP of accreditations that are granted.

NVLAP will add PIV card application and middleware testing to the laboratory's next regularly scheduled on-site assessment for Cryptographic Module Testing. At that time, the NVLAP assessors will interview laboratory staff, review records, etc. for PIV card application and middleware testing as they will for Cryptographic Module Testing.

NVLAP accreditation for laboratories that are currently **NVLAP**-accredited for Cryptographic Module Testing

A laboratory that is currently NVLAP-accredited in the CMT LAP, but not NPIVP-designated, must contact NPIVP to enter into the laboratory-NPIVP agreement and to receive the NIST-provided test tools.

The laboratory may then apply for NVLAP accreditation for PIV testing.

Laboratories that are not currently NVLAP-accredited for Cryptographic Module Testing

A laboratory that is not NVLAP-accredited for Cryptographic Module Testing may apply for accreditation for Cryptographic Module Testing and PIV testing. The laboratory must meet all requirements of NIST Handbook 150, *NVLAP Procedures and General Requirements*; NIST Handbook 150-17, *Cryptographic Module Testing*; the requirements of the NIST Cryptographic Module Validation Program; and the requirements of the NIST Personal Identity Verification Program.

The laboratory must complete and submit a NVLAP General Application and a NVLAP Program-Specific Application, pay all required fees, submit required management system documentation, participate in required proficiency testing, and undergo an on-site assessment. The document review, proficiency testing, and on-site assessment will cover both CMT and PIV test methods.

Sources of information

NVLAP

http://www.nist.gov/nvlap

NIST Personal Identity Verification Program (NPIVP)

http://www.nist.gov/npivp

NIST Cryptographic Module Validation Program (CMVP)

http://www.nist.gov/cmvp